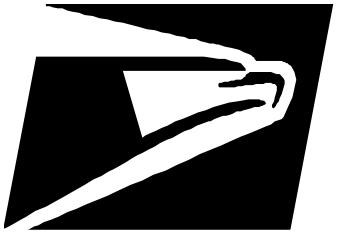

UNITED STATES POSTAL SERVICE®

Corporate Flats Strategy

Prepared by Strategic Operations Planning

May 2003

JOHN A. RAPP
SENIOR VICE PRESIDENT
OPERATIONS

UNITED STATES POSTAL SERVICE

May 2003

Flat-shaped mail plays an important role in satisfying our customers' business needs. Nearly 30 percent of the volume we process and deliver is flats which represent a significant source of revenue and contribution for the Postal Service.

Recognizing the importance of flats to both the USPS and mailers, we are committed to doing all we can to control not only our internal operating costs but to work with mailers to identify opportunities to reduce their preparation costs as well. This Corporate Flats Strategy is evidence of that commitment.

Modeled after the successful Corporate Automation Plan for letters, the Flats Strategy identifies the near and longer term activities being pursued by the Postal Service and highlights those areas of likely customer impact. The Flats Strategy includes the USPS delivery vision for the future and examines, in general terms, the steps we plan to take to achieve that objective. While a detailed listing of tasks and timelines is not included in this document, they are being managed separately.

Customer involvement is an integral part of the Flats Strategy, and we look forward to working with the mailing industry on this most important endeavor. Comments regarding this document can be e-mailed to this address: FlatStrategyFeedback@usps.gov

John A. Rapp

475 L'ENFANT PLAZA SW
WASHINGTON DC 20260 2700
FAX: 202-268-7509
WWW.USPS.COM

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INTRODUCTION

The United States Postal Service has been highly successful in automating the distribution of letters and stabilizing postage rates by reducing processing costs. At the beginning of the letter automation process, Single-Line Optical Character Reader equipment replaced less efficient mechanized Multi-Position Letter Sorting Machines. With the introduction of Multi-Line OCRs, Bar Code Sorters, and later the Remote Bar Coding System, most letter mail could be sorted to the carrier route level. This helped to offset rising labor costs that would otherwise have resulted in higher rate increases. Subsequently, Delivery Point Sequencing (DPS), i.e., preparing letter mail in the order that the carrier effects delivery, was implemented and dramatically reduced carrier in-office work hours. The result of these improvements is that, although letter volumes have increased significantly over the past five years, automation and DPS have allowed the Postal Service to keep letter postage increases below the rate of inflation.

Automating letters was made easier since most envelopes had predictable address locations, no bound edges, and, most importantly, barcode clear zones. The wide range of physical characteristics and preparation requirements for flats presents unique challenges to automating flats processing. As a result of the limited progress in this area, delivery costs have grown steadily causing price increases that have exceeded the rate of inflation. The Postal Service is, however, committed to achieving breakthrough performance in the handling of flats just as it did for letters. This document describes the Postal Service's plans to achieve this overall objective.

The Corporate Flats Strategy begins with a review of the efforts under way and plans to improve flats operations in the near term (FY2003 and FY2004). This narrative is followed by a section that highlights the importance of customer participation in worksharing programs.

This information is followed by a section describing the Postal Service's delivery vision for the future. This vision extends the benefits of automation to carrier in-office activities i.e., sequencing flats into delivery point order, and will ultimately include combining letters and flats into one Delivery Point Package (DPP) to improve street efficiency significantly. This section contains a narrative describing two options for attaining the delivery vision that the Postal Service will consider. The decision on which option to implement will for the most part be based on each program's economic return on investment and system development timeframe.

In the next section, the document overviews the activities that will take place to determine the feasibility of achieving the delivery vision in the mid term period (FY2005 and part of FY2006). The activities are organized under two headings: 1) Implementing Flats Sequencing and 2) Identifying Customer Impacts and Participation. The Postal Service is committed to applying the necessary resources to address both of these issues.

The final section describes the actions that will be taken in the longer term (part of FY2006 and beyond) to realize the delivery vision using either a one-step or multiple-step process.

As with the letter automation plan, the Postal Service anticipates that changes in strategy and tactics will occur and as a result options will be added or eliminated from consideration. This document will be updated regularly. Comments and/or questions related to a specific topic can be directed to the appropriate functional group. Comments pertaining to the plan in general should be directed to Strategic Operations Planning at U. S. Postal Service Headquarters.

NEAR TERM FY2003 AND FY2004

IMPROVING CURRENT FLATS OPERATIONS

In previous years, flats processing and delivery costs have trended upward and have caused substantial rate increases for flat shape mail. Despite these adverse trends, flat shaped Standard Mail continues to be second only to First-Class Mail in total revenue contribution. Standard Mail is also a product line that is subject to substantial competition, but can be price sensitive even without competition depending on the economy. Periodicals Mail, while contributing significantly less to the USPS bottom line, is considered the mailbox "anchor." That is, Periodicals Mail is a product that consumers in most cases subscribe to and look forward to receiving, therefore adding to the Postal Service's overall value.

To ensure that these and other flat-shaped products remain affordable, the Postal Service must continually work to minimize operating costs. This section describes activities that will improve operating performance in the near term. These activities fall into the following general categories: deploying and using automation equipment and programs, reducing mail preparation costs, standardizing operational processes, improving manual productivity, tracking performance, capturing savings, and adjusting complement.

The Postal Service will also take the initiative to research and develop new methods to distribute and deliver flats. The Postal Service anticipates that certain technological innovations under development will make the following programs possible in the long run:

- Delivery Point Packaging (DPP), a one-pass system of sorting both letters and flats.
- Flats Sequencing System (FSS), a two-pass system for sorting flats in delivery sequence order.

Many of the tasks associated with evaluating DPP and FSS will be either in progress or completed during the near term. The methods used by the Postal Service to incorporate these results into the Corporate Flats Strategy are described in the mid-term section of this document.

1. DEPLOY FLAT SORTING EQUIPMENT IN THE NEAR TERM

Deployment of the Automated Flat Sorting Machine (AFSM) 100s has been completed. Based on their performance, the Postal Service has determined that the entire fleet of FSM 881s can be excessed without a negative impact on operational performance. Offices that use FSM 881s because their flats distribution operations could not be centralized into larger processing centers will be provided FSM 1000s as replacements. The table below contains actual and projected end-of-fiscal-year national equipment inventories. It is important to note that even though the total number of FSMs will be reduced during the near term, the overall system processing capacity will increase due to the higher throughput of the AFSM 100s and modifications to the FSM 1000s (described later in this section).

FLAT SORTING MACHINE INVENTORIES

	FY2001	FY2002	FY2003	FY2004
AFSM 100	355	534	534	534
FSM 1000	353	353	353	353
FSM 881	379	66	0	0
Total	**1,087**	**953**	**887**	**887**

2. DEPLOY PROGRAMS THAT INCREASE PERFORMANCE IN THE NEAR TERM

The Postal Service will deploy several programs that incorporate technological improvements into current operations and that support the near term goals. An overview of each program is provided below:

Upgraded FSM (UFSM) 1000 Conversion

The FSM 1000 was originally deployed with three barcode readers and/or keying stations. The UFSM 1000 conversion program will replace one keying station with an automated high-speed flats feeder and replace the three barcode readers with one Optical Character Reader (OCR).

AFSM 100 Improvements

Improvements to the AFSM 100 include adding a “doubles” detector to identify and divert double fed mail pieces and enhancing the feeder modules to reduce damage, reduce jams, and increase throughput.

Flat Interim Remote Encoding System (FIRES)

FIRES uses the current AFSM 100 Video Coding System (VCS), which has been relocated from the AFSM site to a Remote Encoding Center (REC). This system in effect simply "stretches" the wire between the AFSM and VCS operation and uses the same hardware and software. Most sites use a T-1 line to transmit images from the AFSM to the REC.

Flat Remote Encoding System (FRES)

The FRES program will be used to improve the efficiency of the AFSM 100 REC keying operation by allowing a larger “pooling” of image keyers at each REC and by providing software and equipment to ensure the workload is evenly balanced. As additional AFSM 100 keying workstations are relocated from the processing centers to the RECs, images from up to six individual machines from multiple locations can be processed at any given time. Eventually, the FRES program will allow each AFSM 100 keying workstation at the REC to process images for up to 99 machines at any given time. The FRES will use commercial-off-the-shelf (COTS) computer hardware and standard interfaces to ease maintenance, ensure long-term viability of the technology, and provide the infrastructure needed for future enhancements.

Flat ID Coding System (FICS)

The FICS program will print an ID TAG on a label that will then be placed on non-barcoded flats. Pilot tests will be conducted to identify the essential modifications needed for flats sequencing and to incorporate flats processing into the Postal Automated Redirection System (PARS).

Secondary Address Readers (SAR)

The SAR program will increase address recognition rates while decreasing errors. The SAR program is part of the AFSM 100 OCR contract that provides for incentive based software improvements. The Secondary Address Readers add additional hardware processing equipment and new OCR applications to the AFSM 100 OCR.

Flats Recognition Improvement Program (FRIP)

The FRIP will enhance the address recognition technology used in flat mail automation equipment. It will improve Optical Character Reader acceptance rates and reduce error rates on all AFSM 100 and UFSM 1000 equipment.

Automatic Tray Handling System (ATHS)

The ATHS program provides selected AFSM 100 machines with automatic tray handling capabilities. The ATHS automatically places empty flat mail trays onto the AFSM 100, removes the full trays, labels, and transports the trays to the Tray Management System or other material handling system. A requirements analysis will be conducted to determine how many AFSM 100s will require the ATHS. Initial estimates suggest that only those facilities with utilization times of 16 hours and higher will receive the ATHS.

Automatic Package Processing System (APPS)

The APPS provides automatic (single or dual induction) package sorting, capable of six-sided OCR/VCS keying with up to 200 output bins. The APPS is projected to have throughput capacity of 11,000 packages per hour with a productivity rate of 550 packages per hour.

Mail Evaluation, Readability, and Lookup Instrument (MERLIN)

The MERLIN program provides the Business Mail Entry Units with a method of ensuring that flat mail received from customers is eligible for worksharing discounts and automates verification procedures.

The table below provides an approximate period for the implementation of each program or modification described above as well as a summary of the impact each should have on operations:

PROGRAM	IMPLEMENTATION PERIOD	PRIMARY IMPACT ON OPERATIONS
UFSM 1000 Conversion	FY2003	Increased Productivity
Flat Interim Remote Encoding System (FIRES)	FY2003	Increased Productivity
AFSM 100 Improvements	FY2003 & FY2004	Increased Productivity
Flat Remote Encoding System (FRES)	FY2003 & FY2004	Increased Performance
Flat ID Coding System (FICS)	FY2003 & FY2004	Increased Performance
Secondary Address Readers (SARS)	FY2003 & FY2004	Increased Performance
Flat Recognition Improvement Program (FRIP)	FY2004 & FY2005	Increased Productivity
Automated Tray Handling System (ATHS)	FY2003 & FY2004	Increased Productivity
Automated Package Processing System (APPS)	FY2003 & FY2004	Increased Performance
Mail Evaluation, Readability, and Lookup Instrument (MERLIN)	FY2003 & FY2004	Increased Quality

3. USE EQUIPMENT TO MOVE FLAT MAIL UP-THE-LADDER IN THE NEAR TERM

The Postal Service is taking steps to move all AFSM 100 or FSM 1000 compatible flat volumes away from manual and keying distribution to more efficient automated operations. This "up-the-ladder"[1] approach will continue to serve as a measure of operational efficiency. Incoming secondary operations that process flats manually in both the processing centers and post offices offer the greatest opportunity for reducing costs. Centralizing the distribution of machinable flats from associate offices, stations, and branches into locations that have AFSM 100s will ensure that machine use is maximized and that Function 4 workload is reduced. The table below lists the "up-the-ladder" goals for total flats handlings:

	FY2003	FY2004
Volume of Flats Processed on AFSM 100s	57.5%	60.0%
Volume of Flats Processed on FSM 1000s & UFSM 1000s	8.8%	8.3%
Volume of Flats Processed on FSM 881s[2]	0.4%	0 %
Volume of Flats Processed Manually in Processing Ctrs.	5.0 %	5.1%
Volume of Flats Processed Manually in Post Offices	28.3%	26.6%

The table below lists the national throughput goals for each operational category:

VOLUME PROCESSED PER MACHINE PER A/P		
	FY2003	**FY2004**
AFSM 100	4.3 million	4.8 million
FSM 1000 / UFSM 1000	1.0 million	1.0 million

The Postal Service will continue to increase the number of zones and carrier routes processed on the FSMs. The table below provides the national goals for the near term period:

ZONES AND ROUTES DISTRIBUTED ON THE FSMs		
	FY2003	**FY2004**
Zones	9,888	10,382
Routes	189,891	199,386

[1] The "up-the-ladder" program focuses on using the FSMs (the most efficient level of distribution) to process flats instead of manual (the most costly and least efficient form of distribution).

[2] It is anticipated that all of the FSM 881s will be removed from service prior to the end of FY2003.

4. REDUCE FLAT MAIL PREPARATION COSTS IN THE NEAR TERM

Unlike letters, the majority of flat mail cannot be taken directly from the opening units and acceptance points to the FSMs, especially the AFSM 100, for processing. Flats must be unpackaged and faced with addresses and bound edges properly oriented to expedite processing. While incoming secondary operations are permitted to mix classes of mail during distribution, most opening units must prepare Periodicals separately from Standard Mail to ensure that service expectations are met.

The Postal Service has taken action to control and reduce the number of work hours used in mail preparation by assigning a unique MODS operation number (035) to identify and track the time spent preparing mail for all flats at opening units.

The following additional improvements will be evaluated during the near term:

- Flats Feeder Assist Device (FFAD) to move flat volumes from pallets to FSM feed tables.
- Wheeled pallet carts to move pallets from the receiving units to processing areas.
- Conveyor belts on SPBS machines to facilitate prepping operations.
- Standardizing the flat mail preparation methods and procedures.

5. STANDARDIZE FLATS PROCESSING OPERATIONS IN THE NEAR TERM

The Postal Service has issued the AFSM 100 Standard Operating Procedures (SOP), the National Standardization Guide (NSG), and the AFSM 100 Support Guide. The intent of these documents is to standardize AFSM 100 processing and distribution throughout the entire system. The NSG explains critical processes that a site must implement in order to achieve projected savings. The SOP, NSG, and Support Guide provide references to all documents published in support of the AFSM 100. An AFSM 100 checklist is used to certify that a site is following established best practices. Areas of savings opportunities are prioritized so that the field concentrates on those operations with the greatest payback potential.

The table below lists the Postal Service's national flats operational productivity goals for the near term:

PRODUCTIVITY GOALS FOR FLATS OPERATIONS

	FY2003	FY2004
AFSM 100	2,450 pcs/hr	2,450 pcs/hr
UFSM 1000	900 pcs/hr	1,128 pcs/hr
FSM 1000[3]	900 pcs/hr	N/A
Manual	450 pcs/hr	450 pcs/hr

[3] All of the existing FSM 1000s should be converted to UFSM 1000s by the end of FY2003.

6. TRACK FLATS OPERATIONS PERFORMANCE IN THE NEAR TERM

To keep focus on the operational improvements that are described in this document, the Postal Service uses a set of key indicators against which national and area performance are measured. These performance indicators are evaluated each accounting period and are available for area review on the Postal Service's internal WEB site. At the same time, an overall operational performance report (which includes this information) is disseminated to the headquarters managers along with a trend evaluation narrative.

Information on these indicators is provided in the table below:

FLATS OPERATIONAL PERFORMANCE

Indicator	Measurement	Expected Trend
Throughput by Machine Type	Total Pieces Handled	Increases in Volume Processed
Work Hours by Machine Type	Hours Used	Decreases in Work Hour Usage
Productivity by Operation	Pieces per Work Hour	Increases in All Operations
Up-the-Ladder Workload	% of Total Workload	Increases in Automated Operations
Up-the-Ladder Work Hours	% of Total Work Hours	Increases in Automated Operations
Mail Preparation Work Hours	Hours Used	Actual Below Plan
# of Zones on FSM	Zone Totals by Area	Attain Plan
# of Routes on FSM	Route Totals by Area	Attain Plan

7. CAPTURE SAVINGS AND ADJUST COMPLEMENT IN THE NEAR TERM

The Postal Service is committed to reducing the costs associated with flats processing. This will be accomplished in two ways: 1) achieving the budgeted work hour savings associated with programs and machine deployments and 2) implementing local and national initiatives to increase productivity. This approach proved successful when used during the automation of letter processing and is working equally well with flats.

SUMMARY

In the near term, actions will be ongoing that will ensure current flats operations continually improve. These actions include upgrading the flat sorting equipment to increase operational productivity and quality, moving mail "up-the-ladder" from manual to automated distribution, reducing opening unit mail preparation costs, standardizing flats processing, tracking performance, and capturing savings through complement management.

NEAR TERM FY2003 TO FY2004

INCREASING CUSTOMER PARTICIPATION IN WORKSHARING PROGRAMS

Historically, a cornerstone of the Postal Service's efforts to hold down operating costs has been an effective worksharing program. Providing incentives to customers who perform work; i.e., presorting, barcoding, destination entry, that would otherwise require postal resources has helped to provide stable rates. The Postal Service expects that affordability combined with service meeting customers' expectations will continue to be the key to growth and customer satisfaction. The Postal Service values customer involvement at each step in the development of new worksharing programs and will continue working closely with the mailing industry on initiatives that improve flats processing and reduce costs.

In addition to working with individual customers, the Postal Service also works collaboratively with the industry as a whole on many key issues. For example, a joint Mailers' Technical Advisory Committee (MTAC) workgroup identified the causes of bundle breakage and recommended changes in requirements and training. Another joint workgroup is examining how mail preparation irregularities are reported to mailers while a third workgroup continues to look for ways to improve worksharing opportunities for the industry. These joint postal/industry groups like MTAC and the Mailing Industry Task Force provide avenues to obtain customer input and feedback. Communicating via other methods such as postal publications (Memo to Mailers, Mailer's Companion, and Postal Bulletin, etc.), Federal Register notices, mailer's association newsletters, Postal Forums, and Postal Customer Councils are critical and will continue to be used.

The following section summarizes some of the initiatives being pursued with customers to improve operating efficiency. These initiatives recognize the importance of ensuring that mail makeup requirements are fully compatible with postal processing and delivery operations.

1. MATCH MAIL PREPARATION REQUIREMENTS TO NEAR TERM PROCESSING NEEDS

Customer make-up and mail preparation directly affect Postal Service processing costs. The Postal Service is committed to working with the industry to find additional opportunities. Listed below are actions that will be taken to ensure mail preparation matches processing needs:

- Examine existing requirements for container presort levels, package piece minimums, and container weight and piece minimums.
- Review the available presort choices. Until the Postal Service is able to find an effective means of automatically sequencing flats in the order of delivery as is now done for letters, the most desirable flats categories are enhanced carrier route or line-of-travel presort.
- Reduce bundle breakage through improved customer preparation and Postal Service processing techniques. This effort was incorporated into the DMM during FY2002. Additional efforts are planned to measure improvement and determine if bundle breakage still remains a significant problem.
- Determine scheme-based preparation requirements based on automation sort plans; 5-digit schemes for flats to be run on the AFSM 100. This effort will help to decrease the number of mailer prepared packages. The outcome will be lower USPS mail preparation costs and enhance customer presort and discount opportunities.

- Move away from using the current "A, 3, D", etc., pressure sensitive bundle labels to requiring more descriptive barcoded ones that indicate the Optional Endorsement Line (OEL) package presort level. This will ultimately enable automated sortation of flats packages on parcel and bundle sorting equipment that have the capability to read this type information. Many large mailers currently use the printed OEL to indicate presort level; this effort will focus on assisting the small to medium sized customers.
- Examine bundle polywrap and packaging specifications; color, opaqueness, reflectivity, strapping locations, to ensure compatibility with future automated bundle sorting equipment.

2. INCREASE CUSTOMER-APPLIED POSTNET BARCODED FLAT VOLUMES IN THE NEAR TERM

Unlike letters, flats automation continues to be entirely dependent upon customer barcoding. More aggressive efforts to identify and remove impediments to customer barcoding are key elements of the flats strategy in the near term. Automated flats distribution will be done at all levels using either the 9-digit barcode, OCR result, or image keying result. The Postal Service will track the amount of 11-digit barcoded flats being entered into the system and use this information to estimate the growth in 11-digit barcoded volume.

The table below lists the projected[4] total flat, and non-carrier routed volumes, and barcoded flat volumes by class:

Flat Mail (Billions)	FY2001 Actual	FY2002 Actual	FY2003 Projected	FY2004 Projected
Total Flat Volume	55.6	51.6	57.1	59.5
Total Non-CRRT Flats	27.4	24.4	26.9	27.2
Total Barcoded Flat Mail	**17.7**	**16.3**	**19.1**	**21.0**
Barcoded First Class	0.6	0.5	0.9	1.3
Barcoded Periodicals	4.0	3.9	4.4	5.1
Barcoded Standard	13.1	11.9	13.8	14.6

3. INCREASE ADDRESS AND BARCODE READABILITY IN THE NEAR TERM

A joint postal/industry workgroup is studying flat mail readability optimization and has made recommendations on how customers can improve their address format quality and meet address location requirements for automation. The focus of this ongoing effort will be to increase the amount of OCR/BCR readable flats in the system.

SUMMARY

The goal of the near-term effort is to achieve significant improvement in the current operating environment. Actions being taken to increase customer participation in flats automation are focused on an effective worksharing program and on increasing the OCR and BCR read rates. The key components of worksharing are a rate structure that provides incentives for desired mailer behavior and package make-up requirements that best match USPS processing needs. Specifically, the Postal Service must create rate structures that ensure that flats are entered at the deepest level in the automation operations as possible, that they are machinable on our most efficient equipment, and that high quality barcoding is maximized. These customer related initiatives, coupled with the operational activities described earlier, are the essential elements of the overall flats strategy for the near term.

[4] These projections are trend-based and used for internal planning purposes only.

DELIVERY VISION

Longer term, the Postal Service will take the next step of incorporating automation into the delivery process. Several options for expanding address sequencing of flats will be explored and these will extend the full benefits of automation to carrier operations. Actions to improve long-term delivery office and street efficiencies must be consistent with the delivery environment of the future.

The Postal Service's ultimate vision for delivery is a seamless operation that produces one package of mixed letters and flats for each delivery point (Delivery Point Packaging or DPP). This vision is based on having high-speed mail sorting and packaging equipment that will efficiently sort and merge the letter and flat mail streams into delivery sequence for the letter carrier. This equipment will be optimally located so that the operational savings can be maximized. Ideally, all presorted mail sequenced using this system would have an 11-digit POSTNET barcode[5] with a standardized address, or address label, format and placement so that the equipment output will result in an address orientation that facilitates efficient delivery.

DPP would replace the labor-intensive carrier casing and pull downs inherent in the existing manual system. This new carrier/delivery unit environment will not involve delivery unit sortation, case pull down, or fixed casing equipment. The packaged volume will then be made available at a central carrier point or location, which may or may not be a traditional delivery unit.

The Postal Service has a long history of testing innovative methods to implement changes in distribution, delivery, and transportation systems and is continuing this tradition by investing research and development funds to evaluate the benefits and costs of implementing the delivery vision.

Delivery Point Packaging (DPP) technology represents the best opportunity to use innovation to improve operating performance. In addition to saving work hours within the carrier function, the resulting packaged volume would enable the Postal Service to explore new transportation alternatives for letter carrier delivery. A major step in the planning process will be determining customer and operating changes needed to prepare and distribute flats prior to incorporating the volume into delivery sequence. DPP planning will start in the near term (the next two years) and should be completed during the mid-term period (within three to five years).

DPP research will initially focus on developing a delivery point packaging machine (Option 1) that uses a one-pass system to sequence both letters and flats. While in-depth analysis of the DPP (Option 1) simulation results is being performed, parallel evaluations of other systems will take place. The Flats Sequencing System (Option 2), a machine that will sequence flats in delivery order using a two-pass system, will also be evaluated.

The research and development time frames for each option will be different and therefore the results of the Flats Sequencing System (FSS) may be available for consideration in advance of the Delivery Point Packaging system. In that event, a corporate decision to postpone implementation of FSS would be required, pending final results of the DPP simulation. Since the Delivery Point Packaging system would use only one pass to finalize letters and flats in delivery sequence, the economic return for the Delivery Point Packaging system may eliminate the need to develop and deploy FSS machines.

The following describes several specific steps leading to the development of the delivery vision and includes diagrams of current and future mail flows under Options 1 and 2.

[5] Depending on the technology available during equipment design and development, it may be possible to substitute an OCR result or information derived from an ID Tag for the POSTNET barcode.

1. EVALUATE THE USE OF ZIP+4 TO ESTABLISH FIRM AND OTHER DIRECTS ON THE FSMS, AFSM 100s, AND UFSM 1000s

In order to reduce the overall volume of flats that must be sequenced, the Postal Service will explore the possibility of using the POSTNET barcode or ZIP+4 to establish additional firm holdouts and carrier shelf sortation on the AFSM 100s. Using ZIP+4 to establish firm holdouts proved to be very effective during letter automation implementation for those firms that had a unique +4 add-on. This process was accelerated when the volume sorted to each separation increased due to the shift from a 9-digit to an 11-digit barcode.

Successful migration of the firm direct concept into flats sortation will depend on whether bin assignment separations are available and whether the volume can be finalized in a one-pass process. Flat sorting machine depth of sort will depend on the number of routes being sorted and on the volume destined for each firm or separation. The expected benefit from this process is a reduction in carrier office time.

2. SEQUENCE FLATS IN DELIVERY READY CONDITION

The Postal Service will develop and deploy the Flats Sequencing System to reduce carrier in-office costs for sequenced flats that do not require casing. An overall reduction in the volume of cased flats will result in a comparable reduction in carrier office time. The Postal Service will work with customers and the Postal Rate Commission to change the rate structure and mailing requirements to maximize the amount of 11-digit barcoded flats produced by mailers.

While Option 2 (Flats Sequencing System) will support the delivery vision by deploying flats sequencing machines, it does not fully realize the delivery vision. The problem of incorporating the carrier cased letters and flats with the sequenced volumes into a delivery point package would remain. One possible solution would be to package the DPS letters and FSS sequenced flats separately, with the carrier casing the remaining volumes. Another solution may be to develop a mail merging machine that could be used to combine machine and carrier sequenced volumes.

Should Option 2 be selected, the Postal Service would need to determine if these or other viable alternatives exist to sort sequenced letters and flats and residual volumes together into a single package for each delivery point. Lacking this, the Postal Service would forego much of the potential street savings in the full delivery vision, but would achieve smaller savings primarily from the reduced carrier casing time in the office.

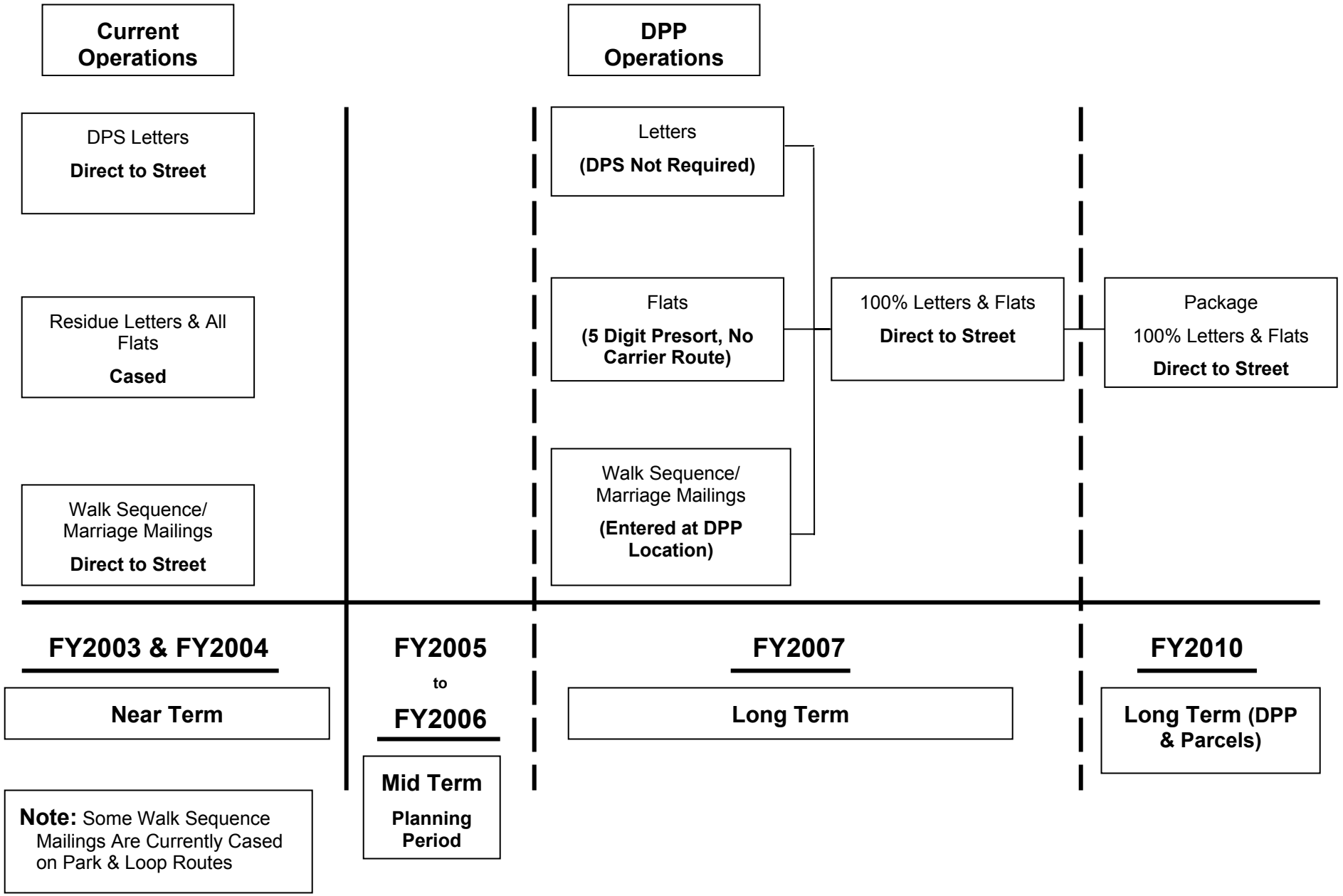
3. IMPLEMENT DELIVERY POINT PACKAGING

This option will provide a seamless carrier delivery operation while reducing carrier in-office and street delivery costs. Packaging mail for each delivery point as a single pre-packaged unit eliminates the need to “finger the mail” to find breaks between delivery addresses. Additional savings include reductions in loading times, improved mail orientation in the delivery vehicle, and the elimination of carrier office time.

Businesses and residential customers have responded favorably to the convenience and weather proofing afforded to their mail when it is delivered as a packaged unit. Ergonomic impacts on street delivery for letter carriers also provided significant improvements over current delivery methods. Packaged mail also provides an opportunity for the Postal Service to explore additional revenue generation potential for “date certain” or “time sensitive” advertising.

- The flow charts on the next two pages provide a graphic overview of the delivery vision showing the current process, the role that firm or carrier directs would play, the shifting of workload associated with walk sequence mailings, and any new or replacement operations.

The Postal Service's Delivery Vision (Option 1)



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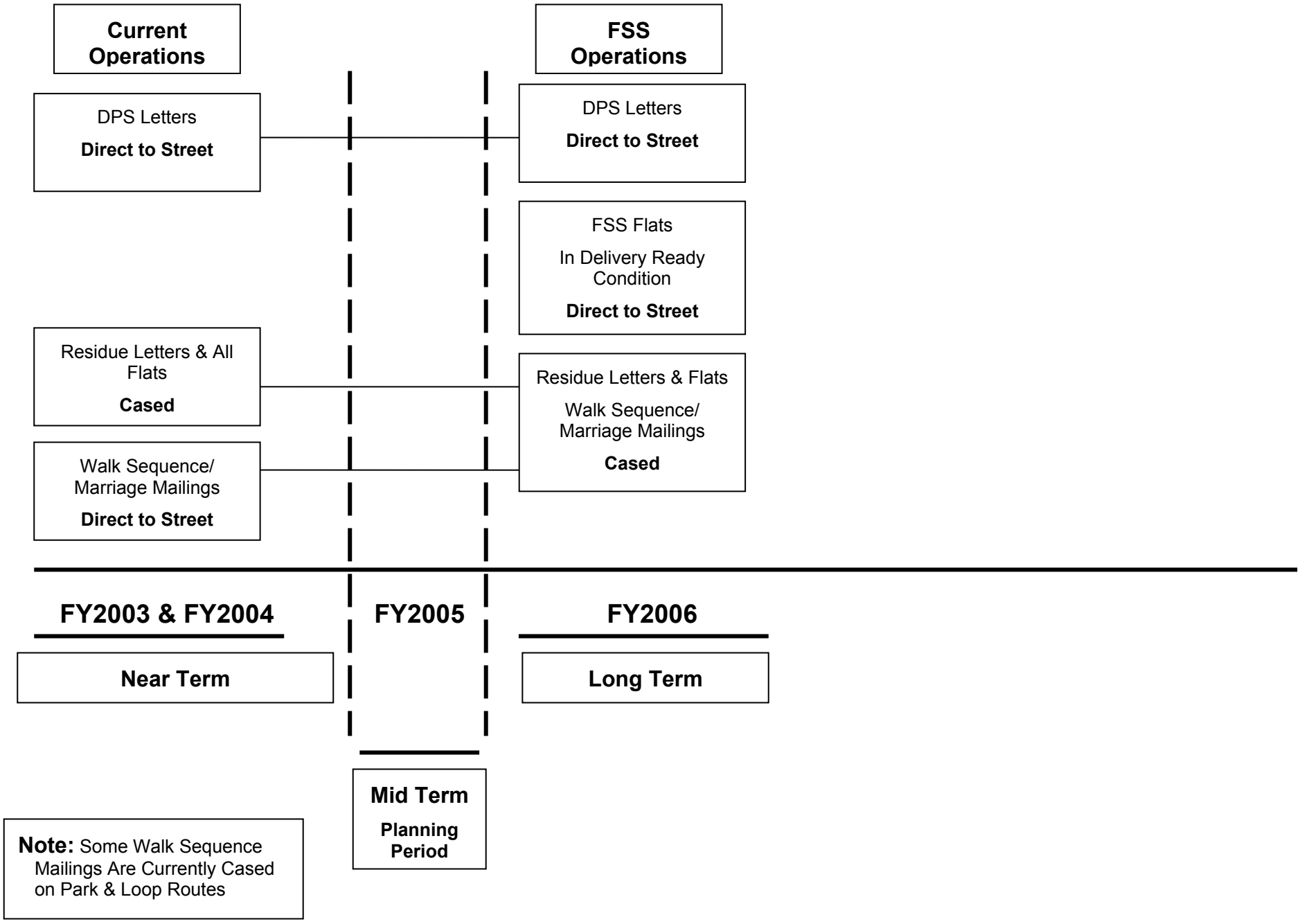
The Postal Service's Delivery Vision (Option 2)



IMPLEMENTING FLATS SEQUENCING

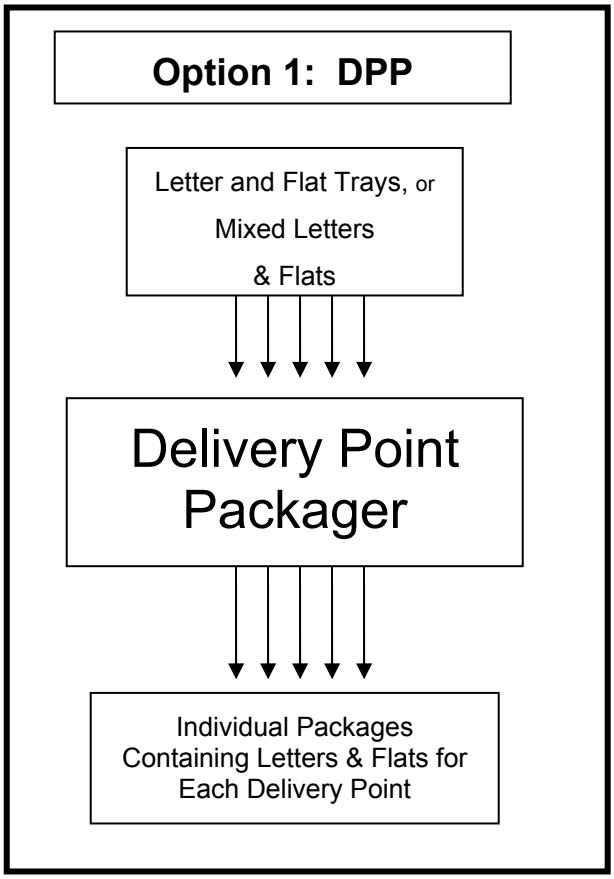
As described in the previous sections, the Postal Service is exploring several options for improving the delivery of flats and letters. Much of the baseline work and the initial research and development of any sequencing machines will take place during the near-term period. Planning for the specific operational adjustments needed to do either the Delivery Point Packaging (Option 1) or Flats Sequencing System (Option 2) will occur during the mid-term time frame.

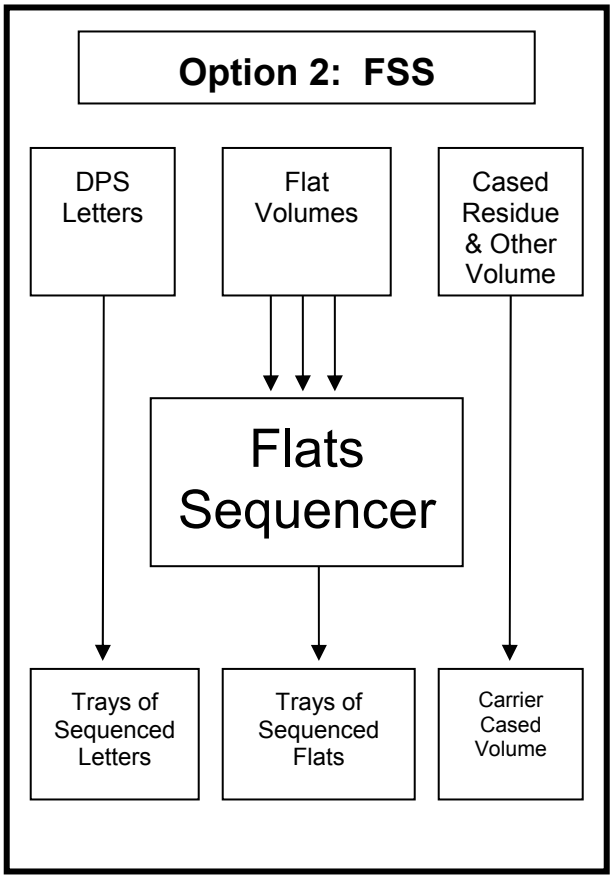
Consistent with the delivery vision, the Postal Service will consider several alternative courses of action. The speed with which each can be followed will depend on how quickly technological solutions can be found and on the level of customer involvement. During the mid-term planning period, the Postal Service will run simulation models to estimate the savings associated with moving directly to Delivery Point Packaging (DPP) or pursuing the Flats Sequencing System (FSS) options.

The Postal Service will work closely with several contractors to refine the operating environment, overcome the technical challenges associated with deployment, and implement flats sequencing in a timely manner. The Postal Service will prepare a detailed cost/benefit analysis to identify the most promising scenarios under varying product mix (classes of mail), schedules, operating windows, etc. Once the Postal Service has identified the viable options it will pursue, development of the associated equipment, technology, systems, and methods will follow.

The decision points will be:

- Proceed directly to Delivery Point Packaging (DPP) in order to sequence both letters and flats in delivery point order using one pass instead of two, or
- Implement the Flats Sequencing System (FSS) in order to reduce the amount of time that carriers spend in the office casing flat mail.





1. RESOLVING EQUIPMENT AND RELATED ISSUES

The Postal Service is in the process of defining functional and design requirements for the proposed DPP or FSS processing equipment. These machines will be used exclusively for incoming secondary distribution to the delivery sequence point and will not be used to process other volumes. In addition to satisfying throughput and sortation quality issues, there are other factors that must be considered including calculating support costs, facility modifications, and service expectations.

Several contractors that produce mail processing equipment and their systems suppliers are collaborating with the Postal Service in developing and testing prototypes. Each equipment type being tested supports flats sequencing.

The Postal Service will also investigate mechanized material handling systems (flats preparation, loading, induction, and sweeping) that could improve the efficiency of either the DPP or FSS processing option.

Some developers have suggested that any one-pass DPP machine would, of necessity, have a very large physical footprint. It has also been suggested that the footprint might not fit into older facilities that have closely spaced structural support columns. The design requirements for these systems must incorporate physical plant layouts, specifically recognizing that structural support columns are not standardized throughout postal facilities. The obvious solution is to develop a modular DPP machine that will be configurable to accommodate building structural members.

The following information provides an overview of the decisions made related to implementing either DPP or FSS:

Using the ASFM 100 to Sort Flats in Delivery Sequence

Although the AFSM 100 was originally designed and deployed to sort flats to the carrier route level, computer simulations and limited field testing proved that the AFSM 100 could sequence flats in delivery point order. However, additional testing and research also confirmed that it could not produce the sequenced mail in a delivery ready condition efficiently within its current design configuration. Further, the inability to increase the mail sorting speed and the problems caused by improper mailpiece orientation in flat trays led to the decision to eliminate the AFSM 100 from contention as a delivery point sequencing machine. Therefore, **the Postal Service has decided not to use the AFSM 100 to sort flats in delivery sequence order**.

USPS Spraying POSTNET Barcodes Directly on Flats

The Postal Service has determined, as a matter of policy, that it will not be cost effective to spray POSTNET barcodes on non-barcoded flats. Therefore, **the Postal Service has decided that it will not spray POSTNET barcodes directly on flats and will instead rely exclusively on the mailers to provide barcoded flats**.

In the near term, simulation results will be available to permit decisions to be made on the following equipment and related issues:

ID Tag Requirements

The Postal Service will determine whether applying ID tags to non-barcoded flats will be compatible with DPP or FSS. The Postal Service will investigate whether the Identification Code Sorting (ICS) tagging system (now used to process letters) can be modified for flats processing. As with letters, the ID tag would reference the address information that resulted from either OCR resolution or video image coding. Additional studies will be conducted to determine if the AFSM 100 and/or the UFSM 1000 machine can be modified to apply ID tags on non-barcoded flats prior to DPP or FSS processing.

Sortation Equipment and Support Requirements

The Postal Service will study the feasibility of using the Flats Feeder Assist Device to increase the productivity of loading mail onto flat sorting machines. Flat bundle sequencing models and equipment from several contractors will be live-tested in the field to provide proofs of concept. This equipment will be thoroughly tested in both lab and operating environments to validate performance and to ensure the Postal Service procures state-of-the-art technology.

2. RESOLVING OPERATIONS ISSUES

The Postal Service is in the process of identifying and resolving operational issues related to implementing DPP or FSS. Planning will focus on:

- Resolving issues associated with quantifying mailflow changes.
- Projecting DPP or FSS candidate volumes and characteristics.
- Determining transportation and scheduling requirements.
- Locating and deploying equipment.
- Quantifying facility space requirements.
- Identifying processing center and carrier unit changes.

Simulation results from earlier modeling efforts will be available to support decisions on the following operations issues:

Mailflow Changes

The Postal Service will determine which operating plan, transportation scheduling, and mailflow changes will be required to implement DPP or FSS. Both the DPP and FSS programs will be considered at the same time providing an opportunity to incorporate possible improvements from one into the other.

Option 1:

Machines performing DPP will sort both letters and flats at the same time. This simultaneous processing emulates manual casing and represents a major change to automated mailstreams. The following is a list of items that will need to be considered during DPP planning:

- Eliminating DPS letter processing for DPP zones.
- Eliminating all FSM incoming secondary processing for DPP zones.
- Eliminating manual letter and flat distribution and casing, pulldown, and tie-out for DPP zones.
- Eliminating bundle sortation of carrier routed volumes for DPP zones.

Option 2:

Machines performing FSS will sort flats in delivery ready condition using a two-pass system. The FSS two-pass process may not be the same that is used now for DPS letters. This is due in part to there being only one first pass, followed immediately by the second pass. Each FSS zone will be scheduled for processing at a specific time which will be determined by the volume arrival profile. While several factors may mirror DPS letter sort plan construction (wrap factor, carrier ID usage, etc.), the actual number of second pass trays used will be predetermined based on an average of 900 flats per carrier and a maximum of 65 flats per tray.

The economic justification for the FSS program requires the elimination of carrier route volumes (other than walk sequence volumes). Flats that are to be delivered within one or more 5-digit delivery zones and that satisfy several physical constraints; i.e., the "machinable" flats would be passed through this 220-400 bin machine twice, and be finalized in walk sequence order for each letter carrier. The following is a list of items that will need to be considered during FSS planning:

- Eliminating AFSM 100 incoming secondary processing for FSS zones.
- Eliminating bundle sortation of carrier routed volumes for FSS zones.

Transportation Requirements

The Postal Service will determine the impact that DPP or FSS will have on transportation and scheduling requirements. Depending on equipment location, both of these programs could potentially create the need for additional transportation runs thereby increasing costs. The following is a list of items that will need to be considered during the planning period:

- Determining the method to transport mail from the plants to the stations.
- Determining the need to modify vehicles to accommodate mail transport equipment changes.

Equipment Requirement and Locations

The Postal Service will use simulation modeling to determine the number of machines and optimal locations. Should the FSS option be chosen, the machines will most likely have to be located in larger processing centers or leased space. However, should DPP be selected, the requirement for Delivery Bar Code Sorters and Flat Sorting Machines will actually be reduced. This reduction can be translated into excess postal space that could be reused, depending on the zone and carrier route to machine ratio. The need for these facilities will be examined and should the potential for their reuse be identified, decisions on extending ownership will be made.

Processing Changes

The Postal Service will determine which internal processing and distribution changes must be made prior to implementing DPP or FSS. These changes will focus on the following areas:

- Operating Plan Windows.
- Platform and Receiving.
- Opening Unit and Mail Preparation.
- Distribution Requirements.
- Mail Transport Equipment Inventories and Staging.

Delivery Changes

The Postal Service will determine which changes must be implemented to ensure savings are captured and complement reductions occur. These changes will focus on the following areas:

- Scheduled Transportation.
- Platform and Receiving.
- Mail Staging.
- Other Unit Activities.
- Mail Transport Equipment Inventories and Staging.

IDENTIFYING CUSTOMER IMPACTS AND PARTICIPATION

Customer involvement will continue to increase in value and will initially be focused on improving the following:

Address Orientation

Flats that are received at the delivery unit are generally presented to the carrier with the address side up and properly oriented for easier casing. In order for the potential operational savings from sequencing flats to be realized, there must be a comparable form of orientation so as to eliminate in-office casing without increasing street time. The Postal Service will work closely with the mailing industry to determine the proper address and address label locations for optimal efficiency in office and street handling.

Mail Characteristics

The flat mail stream will continue to include a wide range of allowable variations in size, weight, shape, and thickness that makes flats processing more complex than letter mail processing. The Postal Service will work closely with the mailing industry to reduce the variations in mail piece design that hamper automated processing.

The Postal Service has also determined that technological advances by themselves will not be enough to control costs. Continued increases in OCR readable and customer applied barcoded volume must serve as the ultimate basis for implementing DPP, FSS, and mail merging. The Postal Service will rely exclusively on customers to apply barcodes to flats (either sprayed directly onto the mail piece or on an address label) and will closely monitor volume increases.

Likely customer impacts will be associated with:

- 11-digit barcode.
- Mailpiece design and/or characteristics.
- Presort level.
- Mail verification and acceptance.
- Mail preparation and presentation requirements.
- Entry point and time of entry.
- Carrier route presort.
- USPS ID Tag application.

Marketing Support for DPP and FSS

The Postal Service will reassess the economic and operational value of carrier route presorting in the DPP and FSS environments. For DPP, the Postal Service would not require presorting below the 5-digit or scheme based levels. For FSS, the Postal Service would substitute an 11-digit barcoded automation rate in lieu of a carrier route discount where possible.

The Postal Service will work closely with mailers to maintain product affordability by driving down operating costs. All issues surrounding the manner in which customers prepare their mail will be explored, investigated, and resolved. Marketing will be responsible for communicating this information to customers through the appropriate channels.

IDENTIFYING POSSIBLE RATE STRUCTURE CHANGES

Changing the rate structure to better support the Postal Service's operational needs may need to be an important part of the flats strategy. Rate changes would serve to encourage customer participation in mail preparation sortation levels and handling methods that are most compatible with postal processing and customer processes. Areas to be examined could include:

- Incorporating a more explicit level of packaging/palletization into the rate structure.
- Implementing containerization incentives to move flat mail from higher cost sacks to lower cost pallets.
- Examining the effects of weight and shape on costs and machinability.
- Examining the pass-throughs of cost savings in workshare discounts.
- Assessing the effect of distance on the transportation costs of flats.
- Determining drop ship entry locations based on where sorting is performed and supplying this information to customers.

SUMMARY

The Postal Service will continue to demonstrate that it is committed to reducing overall costs while maintaining service for the flat mail stream. In the mid-term period, the focus of the flats strategy is to identify and develop equipment that allows the Postal Service to process more flats at a lower cost.

In the next section, the Postal Service provides an overview of the longer term implementation plans for each of the two options described previously. The focus of each option will be on extending the benefits of automation to the carrier operation. As explained earlier, the optimal choice is to implement Delivery Point Packaging (Option 1). This will enable the Postal Service to reduce carrier office time and maximize street efficiency by combining letters and flats into a Delivery Point Package. Should Option 1 prove not feasible, the Postal Service will move to reduce carrier in-office time through the deployment of the Flats Sequencing System (Option 2).

However, implementing FSS by itself may not be the final innovation. Additional research will be done to determine if additional equipment or systemic improvements would be required to implement the delivery vision. The following section contains narrative on expanding the FSS concept by merging the sequenced flats with other volumes to realize one-bundle delivery.

LONG TERM FY2007 AND BEYOND

IMPLEMENTING DELIVERY POINT PACKAGING

In the near term, the focus of the Corporate Flats Strategy will be on deployment and full utilization of existing flat sorting equipment, minimizing manually distributed flat volumes, and working with mailers to identify preparation alternatives that would improve USPS operating efficiency and reduce mailers' production costs.

In the mid-term planning period, two distinct systems will be evaluated, the Delivery Point Packager (DPP) and the Flats Sequencing System (FSS). The potential benefits of each of these systems has been covered in the preceding narrative and reasons given for the preferred solution.

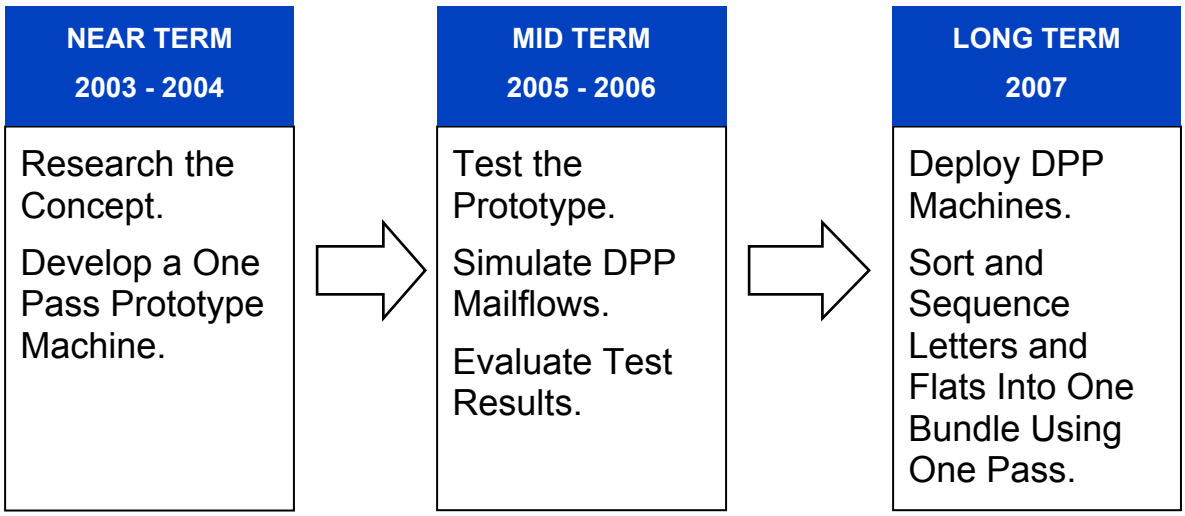
Longer term, the corporate wide focus will be on extending the benefits of automation to the carrier operation. Emphasis will be placed on reducing carrier in-office time through the sequencing of flats in delivery order and maximizing street efficiency by combining letters and flats into Delivery Point Packages.

This section of the document provides an overview of the two implementation options for delivery point packaging and a comparison of activities by planning period. It should be noted that both options will provide the same opportunity to maximize the return on investment while minimizing costs and impacts on our customers.

IMPLEMENT DELIVERY POINT PACKAGING

The preferred choice would be to develop and deploy a single machine or system that sequences both letters and flats and permits the Postal Service to implement delivery point packaging using a one step process. While many of the specific implementation action items that may be required have not been identified, the general concept of sequencing letters and flats together has been approved by senior management.

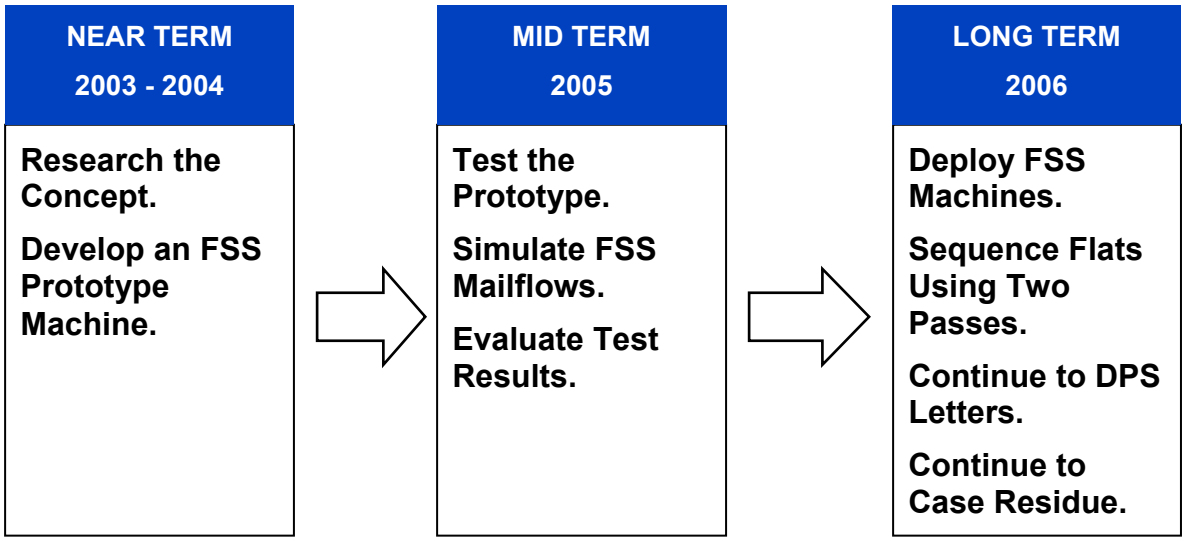
Pending a successful research and development outcome, the Postal Service would be ready to implement DPP during FY2008, using one machine to process both flats and letters. The DPP machines could be deployed at optimal locations and all DPP related work could be performed at those sites. The DPP machine output would be packages containing letters and flats sorted by delivery point. Special handling procedures could be designed for accountable mail and delivery points that cannot accommodate packages. Shown below is a one-step DPP implementation time period schematic, that highlights potential activities of each time period:



IMPLEMENT FLATS SEQUENCING SYSTEM

Should a one-step DPP system prove unfeasible, the Postal Service could begin implementing FSS during FY2006 (or earlier, depending on technological advances) using one machine to sequence flats separately from letters. Because of their size, the FSS machines would most likely be deployed at large processing centers. DPS letter operations would continue as they currently exist. Manual letter and flat distribution operations would for the most part not be affected. Carrier casing times would be reduced.

The schematic below provides an overview of the phases needed to implement DPP using a multiple-step process. The first step in the process would be to develop and deploy the FSS machines.



However, implementing FSS as a stand alone system does not realize the full delivery vision. Should the FSS option be selected, it is anticipated that the Postal Service could quickly begin studying the development of a machine that could merge DPS letters, sequenced flats, and carrier cased residue volume into one mail stream, or if not feasible, individual letter and flats packages. If technically and economically feasible, the optional steps shown below could be pursued: